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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,908

03/15/2004

Martin Schamberg

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EXAMINER

COONEY, JOHN M

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

09/11/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/800,908	<b>Applicant(s)</b> SCHAMBERG ET AL.	
	<b>Examiner</b> John Cooney	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-19,21,23,24 and 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-19,21,23,24 and 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 7-10-09 has been entered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-19, 21, 23, 24 and 26-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms “one-dimensionally” and “two-dimensionally” used to define the series of filters in applicants' claims renders the claims confusing as to intent because it can

Art Unit: 1796

not be determined what degree of differentiation between filtering elements is intended by the general terms “one-dimensionally” and “two-dimensionally”.

The terms “one-dimensionally” and “two-dimensionally” are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

It is not seen the terms “one-dimensionally” and “two-dimensionally” are so widely known in filter technology as to have a definite meaning on their face.

It is additionally noted that even applicants’ disclosure surrounding page 6 of their supporting disclosure is not clear as to which of the two filter elements has the increasing opening sizes towards the outlet side of the filter.

However, even if it is confirmed that it is, in fact, the “one dimensionally” filtering element {or “two-dimensionally” filtering element, if that is the case} that has increasing opening sizes towards the outlet portion of the filter, it is not seen that these descriptions from the supporting disclosure can be construed as limitations to the claims in the patent sense from the claims employment of the terms “one dimensionally” & “two-dimensionally” in describing the filters of their claims.

Claims 17-19, 21, 23, 24 and 26-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "two dimensional filtering element" in line 19. There is insufficient antecedent basis for this limitation in the claim.

Consistency in the term usage in the claims is required, and "dimensional" needs to be replaced with "dimensionally" or other appropriate correction needs to be made.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-19, 21, 23, 24 and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eiben et al.(5,789,457) in view of Sulzbach et al.(5,547,276), Davis et al.(5,527,462), and WO 02/04190.

Eiben et al. disclose apparatuses for the continuous production of polyurethane foam wherein vessels for introducing isocyanate, polyol, liquid carbon dioxide, and other additives are provided for, a means for transporting the components to a main mixing component, a means mixing carbon dioxide with at least one of the reactive

Art Unit: 1796

components prior to introduction to the main mixer, and a discharge body which includes at least one fine mesh screen of dimensions as claimed arranged downstream from the main mixer (see abstract, figures, description of figures, arrow 8 of the figures, and column 1 line 6 – column 6 line 17, as well as, the entire document).

Eiben et al. differs from the claims in that means for introducing and treating filler are not particularly required. However, Sulzbach et al. discloses devices for controlling the mixing of fillers into the reactive materials in polyurethane synthesis operations for the purpose of achieving continuous mixing of metered filler and reactive material (see abstract, and column 2 line 65 – column 3 line 14, as well as, the entire document).

Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the filler providing devices of Sulzbach et al. in the apparatuses provided for by Eiben et al. for the purpose of provisioning for the continuous mixing and introduction of filler in order to arrive at the apparatuses of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Additionally, it is held that modifying elements for transporting filler containing mixtures through the employment of filters for purpose of imparting their filtering and system clog reduction effects is an apparatus modification that is within the purview of the ordinary practitioner in the art. Further, the employment of mechanical self-cleaning filters such as those disclosed by Davis et al. (see the entire document) would have been obvious to one having ordinary skill in the art for the purpose of achieving in-process filter cleaning. Also, agglomerate reducers such as those disclosed by WO 02/04190 (see the entire document) are known to the art for purposes of enhancing material flow, and their

Art Unit: 1796

employment in the apparatuses of Eiben et al. for the purpose of imparting this effect would have been obvious to one having ordinary skill in the art with the expectation of success in the absence of a showing of new or unexpected results.

The arguments made in the Examiner's Answer dated 11/1/07 and upheld in the decision dated 5-12-09 are maintained hereinbelow {"appellant" has been editorially replaced with "applicant"}:

Applicants' arguments have been considered. However, rejection is maintained.

Examiner maintains the position that filtering components for the purpose of separating materials from a component as determined by the filter mesh size is a modification within the skill of the ordinary practitioner in the practice of polyurethane foam forming systems. Although Eiben et al. does not provide a specific means for introducing and treating filler, it does provide a means for providing "additive" which encompasses "filler", and, additionally, Sulzbach et al. is maintained to be properly looked to for addressing the deficiencies of Eiben et al. pertaining to specifics of introducing and treating fillers. Davis et al. is maintained to be properly looked to in addressing the deficiencies in Eiben et al. pertaining to claims requiring self-cleaning filters. Additionally, WO 02/04190 is maintained to be proper for providing for agglomerate reducing effects in filler materials.

Applicants' claims do not differentiate their apparatuses from the combined teachings of the cited prior art. Applicants' indication of the deficiencies of the individual references is not persuasive in refuting the rejection based on the combinations of teachings as set forth above.

Furthermore, as to apparatus elements (a) and (d) of applicants' claim 17, it is noted that the fine mesh screen employed in the apparatus of Eiben et al. meets the requirements of both element (a) and (d) of claim 17, and statements as to the presence of filler and the state that said filler is in during processing are irrelevant in refuting the applicability of the cited prior art in the instant case because the claims are directed towards apparatuses. It is held that the fine mesh screen employed in the apparatuses of Eiben et al. meet the definition of filter as defined by applicants' claims, and it is held that this fine mesh screen/filter is sufficiently located in the apparatus to be identified as being located in the means for transporting filler-containing mixture as required by the claims as they currently stand {element (a) of applicants' claimed apparatus} in addition to being the fine-meshed sieve downstream from the main mixer {element (d) of applicants' claimed apparatus} .

Art Unit: 1796

Applicants' arguments as to the prior art's failure to recognize particular treatments of materials and/or their state/form upon being transported through processing in apparatus parts are unpersuasive of patentable distinction because they are processing effects that relate to the intended use of the apparatus involved and, accordingly, do not identify patentable distinction through reflected limitation in the claimed apparatuses.

Applicants' latest arguments have been considered. However, rejection is maintained. It is not seen that applicants' claims as amended differ in the patentable sense from the claims that were on appeal at the time of the decision rendered on 5/12/09. It is not seen that the descriptive terms "one-dimensionally" and "two-dimensionally" distinguish the filters of applicants' claims from each other in a patentably significant senses. Rejection of now cancelled claim 25, which had limitations to multiple filters in a series, was affirmed in the decision rendered 5/12/09, and the claims, as they now stand, are not seen to offer further distinguishing limitation in the patentable sense.

Further, it should be added that it has been held by the court that the mere duplication of parts has no patentable significance unless a new or unexpected result is produced. (See *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960), as well as, M.P.E.P. 2144.04 VI. B.). At this time a showing of new or unexpected results attributable to differences in applicants' claims that is commensurate in scope with the claims has not been set forth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.



Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/

Primary Examiner, Art Unit 1796